

## **REMARKS**

Claims 1-32 are pending in the present application.

Claims 1-32 stand rejected under 35 U.S.C. § 102(b) over Lupien et al., U.S. Patent No. 6,098,051 ("*Lupien*").

### **REJECTION UNDER 35 U.S.C. § 102(b):**

Claims 1-32 stand rejected under 35 U.S.C. § 102(b) over *Lupien*.

The Applicant respectfully submits that *Lupien* fails to disclose each and every limitation recited by Claims 1-32. The Applicant further submits that Claims 1-32 patentably distinguish over *Lupien*. Thus, the Applicant respectfully traverses the Examiner's rejection of Claims 1-32 under 35 U.S.C. § 102(b) over *Lupien*.

### ***Lupien* Fails to Disclose, Teach, or Suggest Various Limitations Recited in Applicant's Claims**

For example, with respect to independent Claim 1, this claim recites:

**A system for displaying strikes between bids and asks in a market over time**, each strike specifying values for a plurality of strike variables, the system comprising a computer system operable to:

**receive data for a plurality of strikes**, the data reflecting values specified in the strikes for a plurality of strike variables; and

**generate a display of the received data**, the display comprising:

a plurality of polygons, **each polygon representing a strike between a bid and an ask**, each **polygon comprising a plurality of contiguous parallelograms** each associated with one or more different strike variables, one or more dimensions of each **parallelogram** each reflecting a value specified in the represented strike for one of the strike variables associated with the parallelogram;

a strike variable axis representing a range of values for an additional strike variable for which no value is reflected in the parallelograms, each polygon being positioned with respect to the strike variable axis according to the value specified in the represented strike for the additional strike variable represented by the strike variable axis; and

a time axis that is substantially perpendicular to the strike variable axis, each polygon being positioned with respect to the time axis

according to a time at which the represented strike occurred. (Emphasis Added).

Independent Claims 11, 21, 31, and 32 recite similar limitations. *Lupien* fails to disclose each and every limitation of independent Claims 1, 11, 21, 31, and 32.

The Applicant respectfully submits that *Lupien* fails to disclose, teach, or suggest independent Claim 1 limitations regarding a “**system for displaying strikes between bids and asks in a market over time**, each strike specifying values for a plurality of strike variables” and in particular *Lupien* fails to disclose, teach, or suggest independent Claim 1 limitations regarding “**receiv[ing] data for a plurality of strikes**, the data reflecting values specified in the strikes for a plurality of strike variables”. In particular, the Examiner equates “**receiv[ing] data for a plurality of strikes**” recited in independent Claim 1 with “**matches buy and sell orders**” disclosed in *Lupien*. (24 January 2007 Office Action, Page 2). However, **the matches buy and sell orders disclosed in Lupien** are merely associated with a central matching controller which anonymously matches buy and sell orders, and **does not include, involve, or even relate to the receiv[ing] data for a plurality of strikes**, as recited in independent Claim 1. (Abstract and Column 4, Lines 27-48). In contrast, “**receiv[ing] data for a plurality of strikes**” recited in independent Claim 1 **is provided for receiving data for a plurality of values for a plurality of strike variables, wherein the data reflecting values specified in the strikes for a plurality of strike variables**.

The Applicant respectfully submits that a prior art reference (here *Lupien*) anticipates the claimed invention under 35 U.S.C. § 102 **only if each and every element of a claimed invention is identically shown** in that single reference (here *Lupien*). MPEP § 2131. (Emphasis Added). With respect to the subject application, *Lupien* fails to identically disclose, teach, or suggest “**receiv[ing] data for a plurality of strikes**”. Thus, the Applicant respectfully submits that the Office Action has failed to establish a prima facie case of anticipation of Independent Claim 1 under 35 U.S.C. § 102 with respect to *Lupien* because *Lupien* fails to identically disclose “**receiv[ing] data for a plurality of strikes**”, as recited in independent Claim 1. The Applicant further respectfully submits that

these distinctions alone are sufficient to patentably distinguish independent Claim 1 from *Lupien*.

The Applicant further respectfully submits that *Lupien* fails to disclose, teach, or suggest independent Claim 1 limitations regarding ***“generat[ing] a display of the received data”*** comprising a “plurality of polygons, ***each polygon representing a strike between a bid and an ask***, each ***polygon comprising a plurality of contiguous parallelograms*** each associated with one or more different strike variables, one or more dimensions of each ***parallelogram*** each reflecting a value specified in the represented strike for one of the strike variables associated with the parallelogram”. In particular, the Examiner equates a ***“strike between a bid and an ask”*** recited in independent Claim 1 with ***“matches buy and sell orders”*** disclosed in *Lupien*. (24 January 2007 Office Action, Page 2). However, as discussed above, *Lupien*’s ***matches buy and sell orders*** do not equate to ***receiv[ing] data for a plurality of strikes*** and in addition, the *Lupien*’s ***matches buy and sell orders*** do not equate to a ***“strike between a bid and an ask”***, as alleged by the Examiner. Instead, ***“matches buy and sell orders”*** as ***disclosed in Lupien*** are merely associated with a central matching controller which anonymously matches buy and sell orders and ***do not include, involve, or even relate to a strike between a bid and an ask***, as recited in independent Claim 1. (Abstract and Column 4, Lines 27-48). In contrast, a ***“strike between a bid and an ask”*** recited in independent Claim 1 is associated with ***each polygon representing a strike between a bid and an ask*** wherein each polygon comprises a plurality of contiguous parallelograms each associated with one or more different strike variables and one or more dimensions of each parallelogram each reflecting a value specified in the represented strike for one of the strike variables associated with the parallelogram.

The Applicant respectfully submits that a prior art reference (here *Lupien*) anticipates the claimed invention under 35 U.S.C. § 102 ***only if each and every element of a claimed invention is identically shown*** in that single reference (here *Lupien*). MPEP § 2131. (Emphasis Added). With respect to the subject application, *Lupien* fails to identically disclose, teach, or suggest a ***“strike between a bid and an***

**ask**". Thus, the Applicant respectfully submits that the Office Action has failed to establish a prima facie case of anticipation of Independent Claim 1 under 35 U.S.C. § 102 with respect to *Lupien* because *Lupien* fails to identically disclose a **"strike between a bid and an ask"**, as recited in independent Claim 1. The Applicant further respectfully submits that these distinctions alone are sufficient to patentably distinguish independent Claim 1 from *Lupien*.

The Applicant further respectfully submits that *Lupien* fails to disclose, teach, or suggest independent Claim 1 limitations regarding **"generat[ing] a display of the received data"** comprising a "plurality of polygons, **each polygon representing a strike between a bid and an ask**, each **polygon comprising a plurality of contiguous parallelograms** each associated with one or more different strike variables, one or more dimensions of each **parallelogram** each reflecting a value specified in the represented strike for one of the strike variables associated with the parallelogram". In particular, the Examiner equates the **"parallelogram"** recited in independent Claim 1 with a **"square"** disclosed in *Lupien*. (24 January 2007 Office Action, Pages 2-3). However, the **square disclosed in Lupien** is merely a **square**, but is not a **parallelogram**.

It appears that the Examiner is taking Official Notice that a **"square** is equivalent to a **parallelogram"**. (24 January 2007 Office Action, Pages 2-3). **The Applicant respectfully traverses the Official Notice because the asserted facts, as best understood by the Applicant, is not supported by substantial documentary evidence or any type of documentary evidence and appear to be the Examiner's opinions formulated using the subject Application as a template, which constitutes impermissible use of hindsight.** Furthermore, under these circumstances, it is inappropriate for the Examiner to take Official Notice without documentary evidence to support the Examiner's conclusion. (See MPEP § 2144.03). **The Applicant respectfully requests the Examiner to produce authority for the Examiner's Official Notice.**

In addition, if the Examiner continues to maintain the rejection of Claims 1-32 based on the Official Notice, **the Applicant respectfully requests that the Examiner provide documentary evidence** as necessitated by MPEP § 2144.03(C). Furthermore, if the

Examiner is relying on personal knowledge to support the finding that a “**square** is equivalent to a **parallelogram**”, (24 January 2007 Office Action, Pages 2-3), **the Applicant further requests that the Examiner provide an affidavit or declaration setting forth specific factual statements and explanation to support the finding** as further necessitated by MPEP § 2144.03(C).

### **The Office Action Fails to Properly Establish a *Prima Facie* case of Anticipation over *Lupien***

The Applicant respectfully submits that the allegation in the present Office Action that *Lupien* discloses all of the claimed features is respectfully traversed. Further, it is noted that the Office Action provides no concise explanation as to how *Lupien* is considered to anticipate all of the limitations in Claims 1-32. ***A prior art reference anticipates the claimed invention under 35 U.S.C. § 102 only if each and every element of a claimed invention is identically shown in that single reference.*** MPEP § 2131. (Emphasis Added).

With respect to the subject application, the Examiner has not adequately supported the rejection under 35 U.S.C. § 102, because the Examiner has not shown how each and every element of the Applicant’s claimed invention is identically shown in *Lupien*. For example, the Examiner asserts that “**receiv[ing] data for a plurality of strikes**”, in independent Claim 1 is somehow equivalent to **matches buy and sell orders**. (24 January 2007 Office Action, Page 2). The Applicant respectfully disagrees and further respectfully requests clarification as to how the Examiner arrives at this conclusion. In another example, the Examiner asserts that a “**strike between a bid and an ask**”, in independent Claim 1 is also somehow equivalent to **matches buy and sell orders**. (24 January 2007 Office Action, Page 2). The Applicant respectfully disagrees and further respectfully requests clarification as to how the Examiner arrives at this conclusion. In still another example, the Examiner asserts that the “**parallelogram**”, in independent Claim 1 is somehow equivalent to a **square** (i.e., a **square** is equivalent to a **parallelogram**?). (24 January 2007 Office Action, Pages 2-3). The Applicant respectfully disagrees and further respectfully requests clarification as to how the Examiner arrives at this conclusion.

The Applicant respectfully points out that "it is incumbent upon the examiner to identify wherein each and every facet of the claimed invention is disclosed in the applied reference." Ex parte Levy, 17 U.S.P.Q.2d (BNA) 1461, 1462 (Pat. & Tm. Off. Bd. Pat. App. & Int. 1990). The Applicant respectfully submits that ***the Office Action has failed to establish a prima facie case of anticipation in Claims 1-32 under 35 U.S.C. § 102 with respect to Lupien because Lupien fails to identically disclose each and every element of the Applicant's claimed invention, arranged as they are in Applicant's claims.***

### **The Applicant's Claims are Patentable over *Lupien***

With respect to independent Claims 11, 21, 31, and 32 this claim includes limitations similar to those discussed above in connection with independent Claim 1. Thus, independents Claims 11, 21, 31, and 32 are considered patentably distinguishable over *Lupien* for at least the reasons discussed above in connection with independent Claim 1.

Furthermore, with respect to dependent Claims 2-10, 12-20, and 22-30: Claims 2-10 depend from independent Claim 1, Claims 12-20 depend from independent Claim 11, and Claims 22-30 depend from independent Claim 11, and are also considered patentably distinguishable over *Lupien*. Thus, dependent Claims 2-10, 12-20, and 22-30 are considered to be in condition for allowance for at least the reason of depending from an allowable claim.

Thus, for at least the reasons set forth herein, the Applicant respectfully submits that Claims 1-32 are not anticipated by *Lupien*. The Applicant further respectfully submits that Claims 1-32 are in condition for allowance. Thus, the Applicant respectfully requests that the rejection of Claims 1-32 under 35 U.S.C. § 102(b) be reconsidered and that Claims 1-32 be allowed.

## **THE LEGAL STANDARD FOR OBVIOUSNESS REJECTIONS UNDER 35 U.S.C. § 103:**

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, ***there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings.*** Second, there must be a reasonable expectation of success. Finally, ***the prior art reference*** (or references when combined) ***must teach or suggest all the claim limitations.*** The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, ***and not based on applicant's disclosure.*** *In re Vaeck*, 947 F.2d 488, 20 U.S.P.Q.2d 1438 (Fed. Cir. 1991); M.P.E.P. § 2142. Moreover, all the claim limitations must be taught or suggested by the prior art. *In re Royka*, 490 F.2d 981, 180 U.S.P.Q. 580 (CCPA 1974). If an independent claim is nonobvious under 35 U.S.C. § 103, then any claim depending therefrom is nonobvious. *In re Fine*, 837 F.2d 1071, 5 U.S.P.Q.2d 1596 (Fed. Cir. 1988); M.P.E.P. § 2143.03.

With respect to alleged obviousness, ***there must be something in the prior art as a whole to suggest the desirability,*** and thus the obviousness, of making the combination. *Panduit Corp. v. Dennison Mfg. Co.*, 810 F.2d 1561 (Fed. Cir. 1986). In fact, the absence of a suggestion to combine is dispositive in an obviousness determination. *Gambro Lundia AB v. Baxter Healthcare Corp.*, 110 F.3d 1573 (Fed. Cir. 1997). The mere fact that the prior art can be combined or modified does not make the resultant combination obvious unless the prior art also suggests the desirability of the combination. *In re Mills*, 916 F.2d 680, 16 U.S.P.Q.2d 1430 (Fed. Cir. 1990); M.P.E.P. § 2143.01. The consistent criterion for determining obviousness is whether the prior art would have suggested to one of ordinary skill in the art that the process should be carried out and would have a reasonable likelihood of success, viewed in the light of the prior art. Both the suggestion and the expectation of success must be founded in the prior art, not in the Applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 U.S.P.Q.2d 1438 (Fed. Cir. 1991); *In re O'Farrell*, 853 F.2d 894 (Fed. Cir. 1988); M.P.E.P. § 2142.

A recent Federal Circuit case makes it clear that, in an obviousness situation, the prior art must disclose each and every element of the claimed invention, and that any motivation to combine or modify the prior art must be based upon a suggestion in the prior art. *In re Lee*, 61 U.S.P.Q.2d 1430 (Fed. Cir. 2002). Conclusory statements regarding common knowledge and common sense are insufficient to support a finding of obviousness. *Id.* at 1434-35.



**CONCLUSION:**

In view of the foregoing amendments and remarks, this application is considered to be in condition for allowance, and early reconsideration and a Notice of Allowance are earnestly solicited.

Although the Applicant believes no fees are deemed to be necessary; the undersigned hereby authorizes the Commissioner to charge any additional fees which may be required, or credit any overpayments, to **Deposit Account No. 500777**. If an extension of time is necessary for allowing this Response to be timely filed, this document is to be construed as also constituting a Petition for Extension of Time Under 37 C.F.R. § 1.136(a) to the extent necessary. Any fee required for such Petition for Extension of Time should be charged to **Deposit Account No. 500777**.

**Please link this application to Customer No. 53184 so that its status may be checked via the PAIR System.**

Respectfully submitted,

12 April 2007  
Date

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